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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,890	12/21/2000	Adrian Sparks	920476-904862	1275
23644 7590 03/05/2009 BARNES & THORNBURG LLP P.O. BOX 2786 CHICAGO, IL 60690-2786				
EXAMINER				
TRAN, DZUNG D				
ART UNIT		PAPER NUMBER		
2613				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Patent-ch@btlaw.com

Office Action Summary

Application No.

09/745,890

Applicant(s)

SPARKS ET AL.

Examiner

Dzung D. Tran

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date: _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The finality of the Final Office Action dated 09/05/2008 is withdrawn due to new rejection 101.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 4, 7 and 8 are rejected under 35 U.S.C. 101 because it fails to fall within the four statutory categories.

The claim 7 claimed "a computer program". A computer program fails to fall within for statutory categories.

Claim 8 claimed "the program being stored on a machine readable medium", "a machine readable medium" reasonably includes carrier medium. Carrier medium are signal claim per se which fails to fall within for statutory categories.

Claim 4 claimed a method in which the computer program of claim 7 and 8 can be performed all the steps. Thus, claim 4 claimed the steps of the computer program which is fails to fall within for statutory categories.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baroni et al. US patent no. 6,662,308 in view of Type and characteristics of SDH network protection architectures ITU-T, G.841 (10/98).

Regarding claims 1 and 3, Baroni discloses a network node comprising a plurality of network nodes (figure 3, nodes that includes router A, B or C, D or E, F or G, H) each network node being arranged to provide optical signals to at least two transmission paths (figure 3, Protection path p4, p5, p6 and working path p1, p2, p3), the node comprising a link aggregation router (e.g., Figure 3 shown a plurality of working and protection paths from nodes 1, 2,3, 4 ,5, 6 connect to the router) having at least two ports (port P that connect to p4, p5, p6 and port W) a first port (port W that connect to p1, p2, p3) connected to a working transmission path (i.e., solid line) and a second port (port P) connected to a shared protection path (i.e., dashed line) such that in failure free operation both the working transmission path and the shared protection path carry traffic (working transmission path carry a second wavelength and the shared protection path carry the first wavelength see figure 3, col. 2, lines 40-56). Baroni differs from claims 1 and 3 of the present invention in that he does not specific disclose in failure free operation both the working transmission path and the shared protection path carry traffic simultaneously without duplicated of the traffic on the two routes. ITU-T, G.841 discloses in paragraph 6.1, page 20, a MS shared protection rings having protection channels carry extra traffic when not being used for protection of normal traffic. At the

time of the invention was made, it would have been obvious to a person of ordinary skill in the art to include the teaching of ITU-T, G.841 in the system of Baroni. One of ordinary skill in the art would have been motivated to do this in order to utilize bandwidth of the system more efficient.

Regarding claim 2, Baroni further discloses the ring optical network (figure 3) wherein an optical switching device (Fig.3 shown switch that connect to router A and B) arranged to switch the optical signals from working path to spare paths in either direction around the ring.

Regarding claim 4, as far as Examiner understood, Baroni discloses method of transmitting packets traffic of a network node comprising a plurality of network nodes (figure 3, nodes that includes router A, B or C, D or E, F or G, H) each network node being arranged to provide optical signals to at least two transmission paths (figure 3, Protection path p4, p5, p6 and working path p1, p2, p3), the node comprising a link aggregation router (e.g., Figure 3 shown a plurality of working and protection paths from nodes 1, 2,3, 4 ,5, 6 connect to the router) having at least two ports (port P that connect to p4, p5, p6 and port W) a first port (port W that connect to p1, p2, p3) connected to a working transmission path (i.e., solid line) and a second port (port P) connected to a shared protection path (i.e., dashed line) such that in failure free operation both the working transmission path and the shared protection path carry traffic (working transmission path carry a second wavelength and the shared protection path carry the first wavelength see figure 3, col. 2, lines 40-56). Baroni differs from claims 1, 3 and 4 of the present invention in that he does not specific disclose in failure free operation

both the working transmission path and the shared protection path carry traffic simultaneously without duplicated of the traffic on the two routes. ITU-T, G.841 discloses in paragraph 6.1, page 20, a MS shared protection rings having protection channels carry extra traffic when not being used for protection of normal traffic. At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to include the teaching of ITU-T, G.841 in the system of Baroni. One of ordinary skill in the art would have been motivated to do this in order to utilize bandwidth of the system more efficient.

Regarding claims 5 and 6, as far as Examiner under stood, Baroni further discloses the shared protection scheme is an optical shared protection ring (figure 3 shown a shared protect fiber p4) and wherein an optical switching device (Fig.3 shown switch that connect to router A and B) arranged to switch the optical signals from working path to spare paths in either direction around the ring.

3. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baroni et al. US patent no. 6,662,308 in view of Type and characteristics of SDH network protection architectures ITU-T, G.841 (10/98) and further in view of Shanklin et al. US patent no. 6,578,147.

Regarding claim 7, as per claims above, as far as Examiner under stood, Baroni and ITU-T, G.841 disclose all the limitations except for a computer program arranged to control the transmission packet. Shanklin discloses the load balance software can be programmed so that only packets destined for a given range of IP addresses are copied

to intrusion detection sensors (i.e. control the transmission of packet traffic) (col. 6, lines 29-56). Since use of software programming for controlling the optical signal transmission is well known in the art for redirecting the optical signal from a congested working path or an over load working path to the protection paths or alternate paths. It would have been obvious to an artisan at the time of the invention to include the teaching of Shanklin in the system of Baroni and ITU-T, G.841. One of ordinary skill in the art would have been motivated to do this in order to recovery operation performed of the optical system in case of a failure or break of the transmission path or traffic congestion on one path or at fault. Thus, it improves the reliability of the optical system and increase the capacity of the network.

Regarding claim 8, as far as Examiner understood, Shanklin further discloses a router or switch is processor-based and includes load balancing programming, which controls how packets are distributed from the internetworking device to the sensors for processing (col. 2, lines 54-58).

Response to Arguments

4. Applicant's arguments filed 04/29/2008 have been fully considered but they are not persuasive.

Applicant's arguments that Baroni only presents the use of routers to send data over a network to routers located in other parts of the network. Baroni does not disclose a network node comprising a link aggregation router. Link aggregation is a well known term which is defined in the specification as follows:

"Link aggregation is a method of grouping physical link segments of the same media type and speed, and treating them as if they were part of a single, logical link segment."
(page 5, line 6)

This definition continues with the explanation that: "If a link in a trunk fails, the flows mapped to that link are dynamically reassigned to the remaining links of the aggregated link." (page 5, line 12)

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Link aggregation is a method of grouping physical link segments of the same type and speed, and treating them as if they were part of a single, logical link segment (page 5, line 6) and if a link in a trunk fails, the flows mapped to that link are dynamically reassigned to the remaining links of the aggregated link (page 5, line 12)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed.Cir. 1993). Baroni clearly discloses in Figure 3, a network node comprising a plurality of network nodes (figure 3, nodes that includes router A, B or C, D or E, F or G, H) each network node being arranged to

provide optical signals to at least two transmission paths (figure 3, Protection path p4, p5, p6 and working path p1, p2, p3), the node comprising a link aggregation router (e.g., Figure 3 shown a plurality of working and protection paths from nodes 1, 2,3, 4 ,5, 6 connect to the router) having at least two ports (port P that connect to p4, p5, p6 and port W) a first port (port W that connect to p1, p2, p3) connected to a working transmission path (i.e., solid line) and a second port (port P) connected to a shared protection path (i.e., dashed line) such that in failure free operation both the working transmission path and the shared protection path carry traffic (working transmission path carry a second wavelength and the shared protection path carry the first wavelength see figure 3, col. 2, lines 40-56). Furthermore, the claims in pending application should be given their broadest reasonable interpretation. See *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran
02/27/09

/Dzung D Tran/

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Primary Examiner, Art Unit 2613